EXHIBIT 22

Message

From: Dave Steinberger [dave.steinberger@advertiserperceptions.com]

Sent: 4/30/2018 6:51:38 PM

To: Alex Shellhammer [ashellhammer@google.com]

CC: Kevin Mannion [kevin.mannion@advertiserperceptions.com]; Yamini Gupta [yaminigupta@google.com]; Gabe

Bender [benderg@google.com]; Barbara Leung [barbara.leung@advertiserperceptions.com]

Subject: Re: SSP Report update
Attachments: 2018 SSP for Google 001.pdf

Hi Alex,

As requested, attached you'll find the SSP research we recently presented to Gabe. To summarize the key findings:

Competitive landscape

- Surprising to see Yahoo/Brightroll's leadership across the funnel metrics
- o Publishers are the most familiar with Yahoo/BrightRoll, above Google
- o Past SSP usage: Yahoo sizeable lead over others, including DoubleClick
- o 2018 consideration: Yahoo ahead of Google and others, but many are in the race
- o 2018 intention: DoubleClick among tight pack of leaders
- If publishers could choose only 1 SSP, Yahoo would lead Google

DoubleClick Ad Exchange vs. other SSPs

- Among market and business selection criteria, PMP capabilities are the most important
- o DoubleClick trailing in all key criteria
- o DoubleClick average in auctions, leading in brand momentum
- o Not surprisingly, DoubleClick trails in sub-syndication
- What tech criteria are key to driving intention? 3rd party integration and ad placement auditing tools
- o DoubleClick in tight race for lead in 3rd party integrations
- Among technology criteria, publishers care most about measuring creative across devices, reporting, and KPI analytics
- o Google typically seen as a leader in campaign analytics & measurement, DoubleClick uncharacteristically trails in all reporting/analytics criteria

As Kevin mentioned, moving forward we're going to rebalance the respondent pool to prioritize on publishers with revenue or ad/sales operations responsibilities. There will be other adjustments as well and we may reach out for input as we continue the fine-tuning for the next wave of our SSP report.

Best, Dave

On Mon, Apr 30, 2018 at 9:03 AM, Alex Shellhammer <<u>ashellhammer@google.com</u>> wrote: +Yamini

Hi Kevin,

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Thank you for the update, and I'm I wish I could have made the meeting. I got caught up in an urgent project.

Is there any way I could see a summary of the findings of the initial wave. I understand that you want to recalibrate the respondent list, but I'd be interested to see the results.

Thanks again, Alex

Alex Shellhammer

Product Marketing Manager |

ashellhammer@google.com

212-565-5565

On Tue, Apr 24, 2018 at 2:12 PM, Kevin Mannion < kevin.mannion@advertiserperceptions.com> wrote: Hi Gabe, Alex,

When we met with Gabe, we noticed a few surprising findings (the prominence of Yahoo for Publishers, for example). Based feedback from you and other clients and on our analysis of the SSP findings, we see a need to recalibrate our respondent profile for the SSP Report. We believe we over-indexed on marketers and underindexed on ops at the publishers we surveyed. The right mix going forward will be balanced between publishers with revenue or ops responsibilities.

We will look at the current wave of SSP as a preliminary set of findings and the June wave as our official Wave 1. Good news for you: you will have full access to the new wave 1 and the December wave 3.

We are therefore offering you and our other clients a gratis wave. No one asked us to do this, but, as our goal is to provide fully actionable insights, we see a need to make adjustments to deliver on that promise. Let us know your thoughts!

Best, Kevin

Kevin Mannion
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The Stronger Your Brand
The More You'll Sell™



2013

Marketplace Overview

Competitive Landscape

Partier Percenties

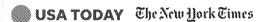
Appendix

Methodology and respondent profile

Representing Top 500 U.S. Websites

Leading Site Categories

700+ Key Decision Makers







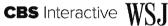














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The Washington Post Turner









- Apparel
- Auto
- · Beauty/toiletries
- Business
- Culture
- Directory
- Finance
- Food
- Health and/or fitness
- · How-to/Informational
- Local
- Movies/Mass Entertainment
- News
- Political
- Print-associated/legacy
- · Real estate
- Retail
- Social
- Sports
- Travel
- TV-associated
- Weather

- Sample: Digital Publisher contacts from The Advertiser Perceptions Media Decision Maker Database and third-party databases as needed.
- · Main Qualification: Work for a digital publisher and involved in the selling of programmatic ad inventory.
- · Fielded: January 2018
- · Incentives include cash & data

Respondents totals:

· N=165 SSP Report

Ranging in title:

- 30% Executive
- 42% Marketing
- 19% Sales
- 8% Operations

Average Unique Monthly Visitors:

21.9 Million

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Marketplace Charles

Competitive Landscape

Platform Perceptions

Appendix

Respondent profile by website visitation

Number of Unique Vis Across Digital Properties	
3 MM to 5 MM	13%
5 MM to 10 MM	27%
10 MM to 20 MM	16%
20 MM to 40 MM	27%
40 MM+	17%
Mean	21.9 MM

	Unique Monthly Visitors	
Department / Job Title	3 million to less than 15 million	15 million or more
Executive (CEO, CFO, COO, CTO)	39%	22%
Marketing (CMO to Manager)	35%	48%
Sales (CRO to Manager)	15%	24%
Operations (COO to Manager)	11%	6%
Sell-Side Advertising Expe	rience	
Average # of Years	8.7	9.8
Programmatic Experience		
Average # of Years	3.8	4.3
Allocate inventory to SSP:		
	100%	100%

Supply Side Platforms

Q: Approximately how many unique visitors did you receive across your digital properties in the last month? Base: Total Digital Publisher Respondents

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Nearly half the publishers see themselves as leaders in programmatic

Company's Programmatic Usage and Embrace

Leader	in	establishing	programmatic	capabilities	44%
		for ac	Ivertisers		~~~ /(

Committed to allocating inventory and resources as market opportunities and demands dictate 41%

Beginner in programmatic and exploring the benefits and challenges 9%

Minimal, with no expectation to shift more resources or inventory toward programmatic 7%

Q: As a publisher, how would you describe your company's embrace of programmatic?

Base: Total Digital Publisher Respondents

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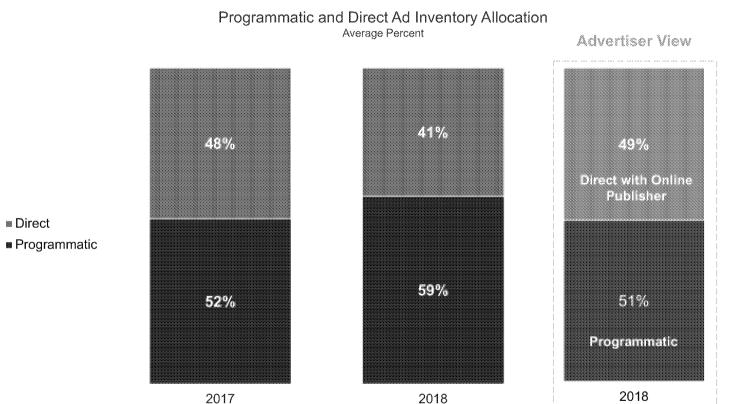
Competitive Landscape

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Appendix

Supply Side Platforms

Publishers see their inventory shifting to 60% programmatic



Q: What percent of your digital/mobile ad inventory went to each last year (2016)? How much are you currently allocating to each this year (2017)? How do you expect your inventory to be allocated next year (2018)?

Base: Total Digital Publisher Respondents

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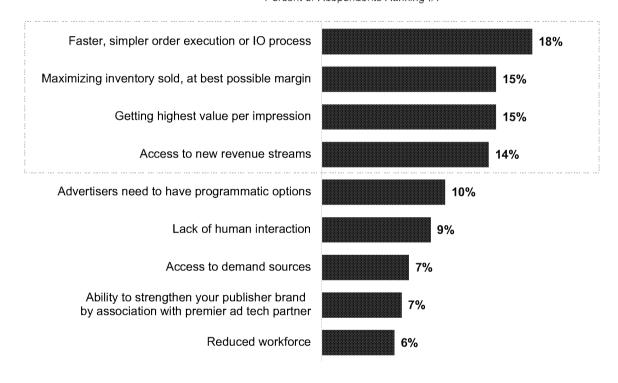
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Appendix

What's the promise of programmatic? Efficiency, improving margins, new revenue streams

Top Issues Programmatic Helps Solve for Publishers
Percent of Respondents Ranking #1



Q: Please rank the top three issues that programmatic helps solve for publishers. Base: Total Digital Publisher Respondents

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Competitive Landscape

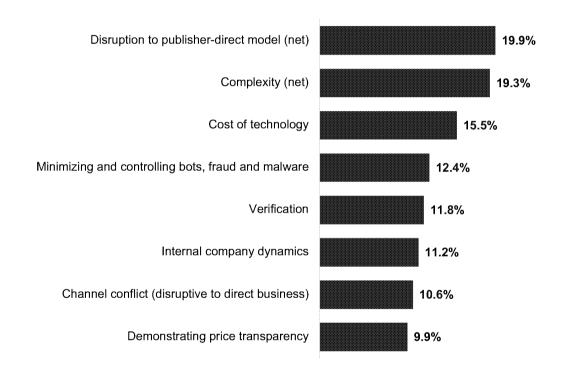
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Appendix

Roadblocks? Disruption to legacy publisher model, complexity

Top Three Factors Limiting an Even Greater Share of Inventory Allocation toward Programmatic:

Percent of Respondents Ranking #1



Disruption to publisherdirect model (net) is comprised of:

- Diminishing publisher margins on impressions sold
- Channel conflict (disruptive to direct business)

Complexity (net) is comprised of:

- Complexity of technology
- Requires talent and knowledge to get it off the ground

Q: Please rank the top three factors that limit an even greater share of your inventory allocation toward programmatic. Base: Total Digital Publisher Respondents

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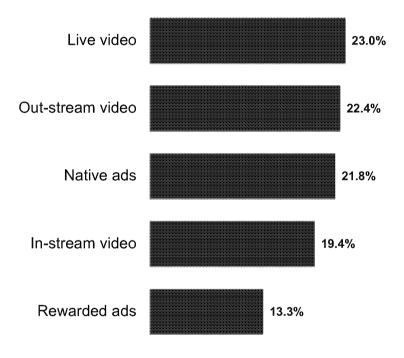
Particle Perception

Appendix

Supply Side Platforms

Most important ad formats SSPs need to support: video streaming variations and native

Ad Formats in Order of Importance for SSP to Support
Percent of Respondents Ranking #1



Q: How would you rank the following ad formats in order of importance for your SSP to support? Base: Total Digital Publisher Respondents

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Appendix

How can SSPs make the ad world a (brand) safer place?

Importance of SSP Providing Brand Safety Features

Percent of Respondents Rating 5 "Very Important"

Rank	Safety Features	Rating 5 "Very Important"
1	Prevents counterfeit inventory by using ads.txt	55%
2	Enables you to adhere to the Coalition for Better Ads, Better Ads Standards	54%
3	Technology to block botnet or other fraudulent traffic	52%
4	Ability to troubleshoot bad ads on your account	48%
5	Technology for publishers to block sensitive categories of ads (e.g. Alcohol, Pharma, COPPA, etc.)	46%
6	Supports AMP ads	41%

Q: How important is it that your SSP provide the following brand safety features? (1-Not at all Important, 5-Very Important)
Base: Total Digital Publisher Respondents

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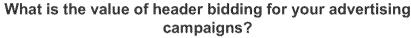
Particle Perception

Appendix

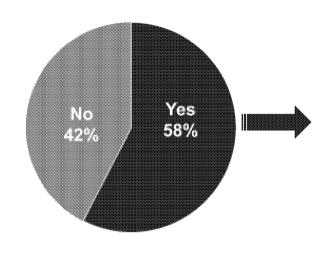
Demand-side view of header bidding: most are familiar, see it it as a benefit

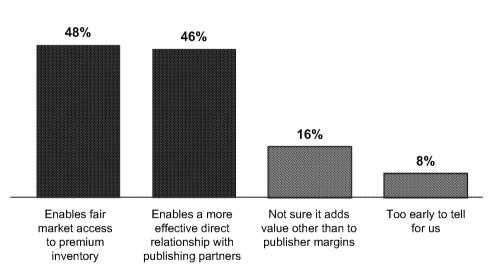
Are you familiar with header bidding?

Percent of Respondents (Buyers)



Percent of Respondents (Buyers) Familiar with Header Bidding





Q: Are you familiar with header bidding?
Base: Total Programmatic Respondents
Q: What is the value of header bidding for your advertising campaigns?
Base: Familiar With Header Bidding
Source: Programmatic Intelligence Report Wave 4 – DSP and DMP Reports

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Nearly 3 of 4 publishers have implemented header bidding The rest are exploring it

Usage of Header Bidding
Percent of Respondents

Fully embraced: 34%

Early stages: 35%

Exploring: 22%

Not personally involved but focus for our company 5%

5% not involved, not a focus

Header Bidding

is defined as an advanced programmatic technique wherein publishers offer inventory to multiple ad exchanges simultaneously before making calls to their ad servers.

Q: Which of the following statements best applies to your usage of header bidding? Base: Total Digital Publisher Respondents

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Supply State Patholic

Private marketplace deals seen as the strongest growth area

Growth Areas of SSP or Ad Server
Percent of Respondents

Programmatic direct/PMP deals 37%

Header bidding 23%

New formats 21%

Direct 12%

Auction changes 7%

Q: In the next few years, in which of the following areas do you think your SSP or Ad Server will see the most growth?

Base: Total Digital Publisher Respondents

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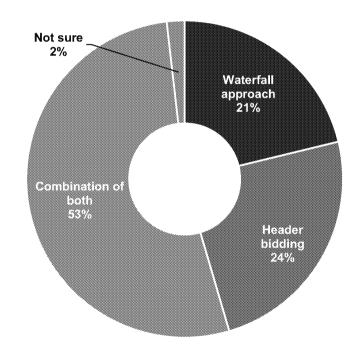
Appendix

Supply Side Platforms

Majority of publishers using a combination waterfall and header bidding approach

Inventory Selling to SSPs, Ad Networks and Exchanges

Percent of Respondents



Q: How is your inventory sold to SSPs, ad networks and exchanges?

Base: Total Digital Publisher Respondents

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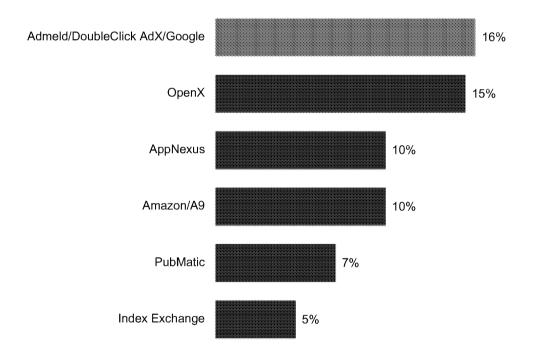
Appendix

Supply State Medicants

Google/Admeld and OpenX considered to be the leaders in header bidding

SSPs Considered Leaders in Header Bidding

Percent of Respondents (Verbatim Responses)



Q: Which SSPs do you consider to be leaders and partners when it comes to header bidding? Base: Total Digital Publisher Respondents

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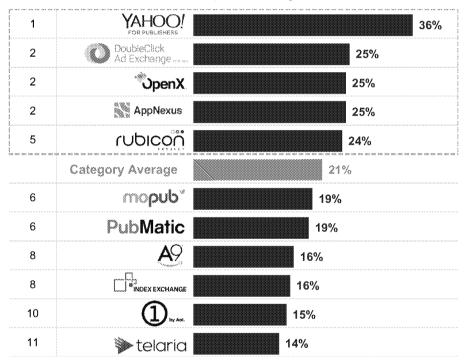
Marketplace Overview

Appendix

Surprise? Publishers are the most familiar with Yahoo, more so than Google

Familiarity with Supply Side Platforms

Percent of Respondents Rating 10 on a 10-Point Scale



Note: Yahoo was referred to in study as "Yahoo for Publishers (including BrightRoll)"

Q: How familiar are you with each of the following Supply Side Platforms (SSPs)? (1 = Not at all Familiar; 10 = Very Familiar) Base: Total Digital Publisher Respondents

Advertiser Perceptions 18



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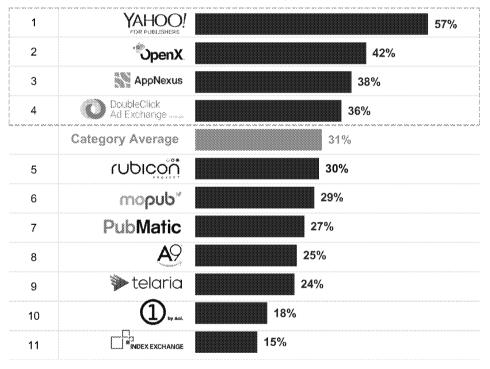
Appendix

Sanda Sala Platforms

Past SSP usage: Yahoo sizeable lead over others, including DoubleClick (DCLK)

Usage of Supply Side Platforms in the Past Year

Percent of Respondents



6.7Average Number of SSPs used in past year

Average Number of SSPs expect to use in next 12 months

Q: Which of these Supply Side Platforms (SSPs) you said you are familiar with have you used in the past year? Base: Total Digital Publisher Respondents

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Marketplace Overview

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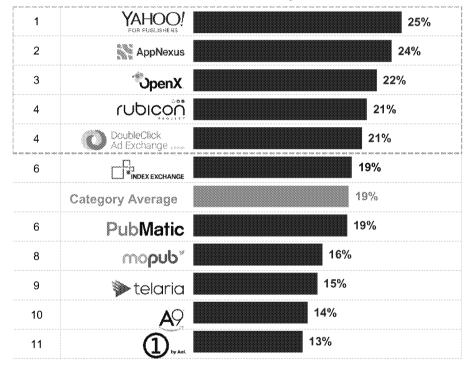
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Appendix

2018 consideration: Yahoo ahead of Google and others, but many are in the race

Consideration of Supply Side Platforms

Percent of Respondents Rating 10 on a 10-Point Scale



Q: How likely are you to consider each of the Supply Side Platforms (SSPs) you said you are familiar with for use in the coming year? (1 = Not at all Likely; 10 = Very Likely)

Base: Total Digital Publisher Respondents

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Marketplace Overview

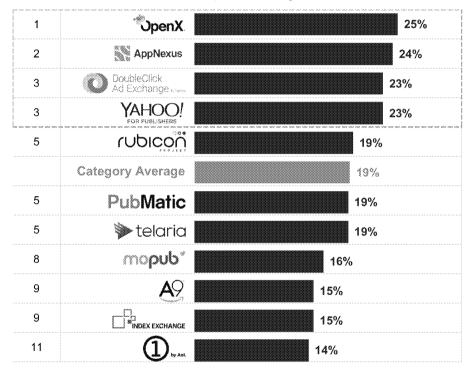
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Appendix

2018 intention: DCLK among tight pack of leaders

Intention of Supply Side Platforms

Percent of Respondents Rating 10 on a 10-Point Scale



Q: How likely are you to actually use each of the Supply Side Platforms (SSPs) you said you are considering for use in the coming year? (1 = Not at all Likely; 10 = Very Likely)

Base: Total Digital Publisher Respondents

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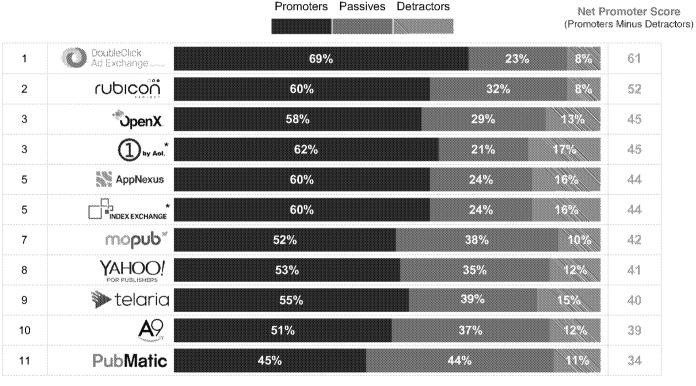
Appendix

Straight State Sections

Net Promoter Scores are high in general and for Google in particular

Likelihood to Recommend Supply Side Platforms

Sorted by Net Promoter Score



*Base Size = 20-29 (Small Base)

Q: How likely would you be to recommend to a colleague the Demand Side Platform(s) (DSPs) you have used in the past year?

Base: Total Digital Publisher Respondents (Variable Base)

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Marketplace Overview

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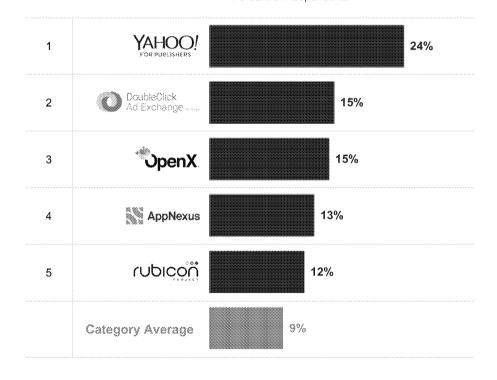
Particle Perception

Appendix

Supply Side Platforms

If publishers could choose only 1 SSP, Yahoo would lead Google





Q: If you were to only select one, which of these Supply-Side Platforms (SSPs) would you choose to partner with for an advertising campaign? Base: Intend to Total Digital Publisher Respondents in the Next Year

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Marketplace Overview

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Appendix

Which SSP stands out for native advertising? Yahoo leads Google

SSP Doing the Best Job with Native Advertising

Percent of Respondents

Native		
1	YAHOO!	18%
2	DoubleClick Ad Exchange	14%
3	*UpenX	13%
4	mo pub *	9%
5	rnpiင်ဝိုပ္ပံ	8%
6	AppNexus	8%
7	A 9	8%
8	> telaria	7%
9	PubMatic	6%
10	INDEX EXCHANGE	4%
11	D by AGI.	3%

Q: For each of the following formats, which of these SSPs is doing the best job when it comes to integrating with your site's look and feel? Base: Considering Supply Side Platforms (Variable Base)

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Marketplace Overview

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Appendix

Which SSP is the leader in mobile ads? Google trails Yahoo and others

SSP Doing the Best Job with Mobile Advertising

Percent of Respondents

	Mobile	
1	YAHOO!	19%
2	AppNexus	15%
3	[®] UpenX	14%
4	DoubleClick Ad Exchange	11%
5	mo pub *	10%
6	rnpico"	6%
7	> telaria	5%
8	& 9	5%
9	D by Aci.	5%
10	Pub Matic	4%
11	□ * index exchange	4%

Q: For each of the following formats, which of these SSPs is doing the best job when it comes to integrating with your site's look and feel? Base: Considering Supply Side Platforms (Variable Base)

Advertiser Perceptions 25



Methodology

Marketplace Overview

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Appendix

Publishers say Yahoo also takes a leadership position for video

SSP Doing the Best Job with Video Advertising

Percent of Respondents

Video		
1	YAHOO!	22%
2	*UpenX.	13%
3	DoubleClick Ad Exchange	12%
4	AppNexus	9%
5	unpicoပို့	8%
6	A 9	8%
7	mo pub ′	6%
8	> telaria	6%
9	PubMatic	5%
10	D by Adl.	5%
11	□ *index exchange	4%

Q: For each of the following formats, which of these SSPs is doing the best job when it comes to integrating with your site's look and feel? Base: Considering Supply Side Platforms (Variable Base)

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Marketplace Overview

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Appendix

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What makes DCLK a preferred partner?

Reasons for SSP Preference

Percent of Respondents

"They have always delivered amazing customer service and features that allow me to make any/all changes on the fly."

- CEO/Founder (10 – 20MM)

"Great service." - CEO (50MM+)

"They have the products and services that meet our needs...in one place" - EVP/SVP (30-40MM)

"Broad scope of customer reach and engagement."
- CEO (40-50MM)

"It has the highest quality ad marketplace and built for supply partners and maximizes business goals."
- CMO (1 – 10MM)

"Best results." - CRO (10-20MM)

"They are a leader in the industry."

- VP (10 – 20MM)

"Innovation and better technology."
- CMO (30- 40MM)

"They have been our go to for years so we are most comfortable here."
- CRO/Head of Sales (20MM+)

Q: What does [SSP] do or offer that makes them your preferred partner? Base: Total Digital Publisher Respondents

Indicates monthly unique visitors

Advertiser Perceptions 27

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Marketplace Overview

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Appendix

What do SSPs need to do to improve?

Most common comment for DCLK and YFP: Nothing

Preferred SSP Potential Improvements Percent of Respondents



"Be more supportive during tech issues."
- CEO/Founder (1 – 10MM)

"More value and widespread coverage."
- CRO/Head of Sales (10 – 20MM)

"Security and innovation."
- CMO (20MM+)

Q: How can [SSP] improve further? Base: Total Digital Publisher Respondents



"Can develop leadership in the header bidding technology and auction bidding."

- CMO (1 – 10MM)

"Provide more protection for the fraudulent traffic of the ads with stronger interface." - **Director** (1 – 10MM)

"Feature to customize the appearance of our report and maximize our customer base."

- Manager (10 – 20MM)



"Preventive maintenance should be offered allowing us to run the business without any down time."

- CTO (10 - 20MM)

"Inventory management must not be complicated and hard to navigate.

- CMO (10 – 20MM)

"More improved premium video content with reliable delivery."

- Manager (10 - 20MM)

Indicates monthly unique visitors

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Memorial

Marketplace Overview

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Appendix

Supplies State Plantings

What criteria matter most of the 33 below when selecting an SSP?

Business and Market Criteria:

- Access to demand (e.g., introductions to advertisers/agencies and proprietary demand)
- 2. Allowing for sub-syndication (i.e., reselling of publisher's inventory by buyers on their platform)
- Auction dynamics (e.g., first price, second price, floor pricing automation & soft floors etc.)
- 4. Clear and compelling technology roadmap
- 5. Effective and engaging formats (in video, mobile, native)
- 6. Fee transparency (e.g., buyer fees, client fees, etc.)
- 7. Fee structures and revenue sharing plans that are fair to the publisher
- 8. Leading edge header bidding capabilities
- 9. Payment terms (e.g., Net 30, 60, 90)
- 10. Positive momentum for brand in the market
- 11. Programmatic direct/private marketplace (PMP), premium programmatic capabilities
- 12. Open exchange capabilities
- 13. Thought leadership of ad tech brand

Service and Support Criteria:

- Proactively share ideas and expertise to enable us to succeed
- Make it easy for us to find the solutions or answers we need
- 3. Effective tech support

Technology Criteria:

- 1. Ability to deliver native, video and mobile formats that integrate with our site's look and feel.
- Appropriate brand safety controls (tools to block and remove inappropriate ads)
- 3. Auditing tools for control over ad placement
- 4. Bad ads protection (spam, malware, invalid traffic)
- 5. Data available in the platform (i.e., impression level auction data, advertiser transparency, bid transparency, etc.)
- 6. Easy to sell and book via platform
- 7. Resources/tools for overseeing ad quality
- 8. Supported inventory formats
- 9. Third-party integrations
- 10. Visibility into accurate, available inventory
- 11. Viewability of ads

Sales Relationship Criteria:

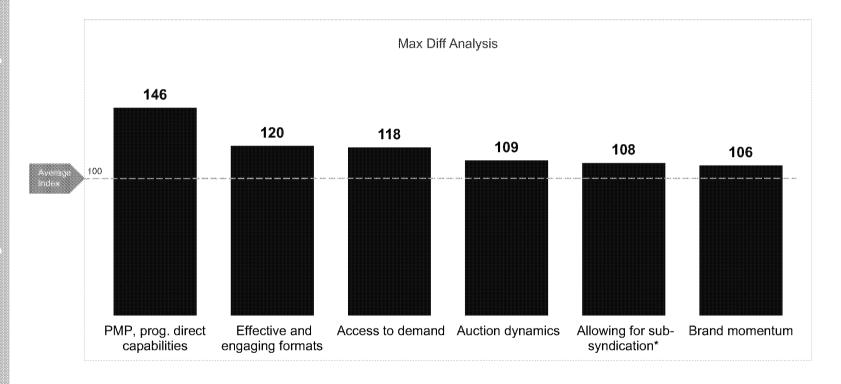
- 1. Demonstrates knowledge of publisher goals, needs
- 2. Is easy to work with
- 3. Responsive to client needs
- 4. Sales skills (listening, attentiveness, negotiating, etc.)
- 5. Technology expertise
- 6. Understanding of client goals, need

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- orniats
 Fee transparency
 Fee structures and revenue
 sharing plans that are fair to

PMP capabilities lead 13 market and business selection criteria



*Sub-syndication involves reselling of inventory

Q: Thinking about Supply Side Platforms (SSPs), how important are the following business and market criteria? Base: Total Digital Publisher Respondents

Advertiser Perceptions: 31

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Consideration rankings (see slide 21) Leaders

- A CONTRACT

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DCLK trailing in all key criteria: Index leads in PMP, the most important criterion

Index of Percent Rating SSPs 10 on a 10-Point Scale

PMP, prog. direct capabilities (146)	
□ . □ [®] NDEX EXCHANGE	160
>> telaria	105
∜ UpenX	105
YAHOO!	99
PubMatic	97
& 9	97
∖npicöü	91
(D) by Acil.	91
DoubleClick Ad Exchange	90
mo pub *	86
AppNexus	80

Effective and engaging formats (120)	
Pub Matic	134
YAHOO! FOR PUBLISHERS	117
A 2	116
> telaria	111
mo pub "	104
D by Aos.	102
r∩pico <u>u</u>	99
III.	90
**UpenX	85
OaubleClick Ad Exchange	78
AppNexus	63

Access to demand (118)	1
YAHOO!	132
(1) by Acs.	114
□ SHOPEX EXCHANGE	113
> telaria	108
πορυ	108
A 9	107
*\textsqrage(\textsqrage)\textsqrage(\textsqrage)	99
AppNexus	86
PubMatic	84
rnpico <u>u</u>	82
DoubleOfick Ad Exchange	68

Q: How would you rate this Supply-Side Platform (SSP) on the following business and market criteria? Base: Considering Supply Side Platforms (Variable Base)

Advertiser Perceptions 32



Consideration rankings (see slide 21) Leaders

- A contract of

- Barrier Exchange
- 3 Maria

- TO ONE BY ACI

Straight State Sections

DCLK average in auctions, leading in brand momentum Not surprisingly, DCLK trails in sub-syndication

Index of Percent Rating SSPs 10 on a 10-Point Scale

Auction dynamics (109)	
PubMatic	131
> telaria	126
Lnpicoပို့	106
A 9	105
(1) by Aut	104
DoubleClick Ad Exchange	103
YAHOO! FOR PUBLISHERS	100
III.	91
*UpenX.	85
ოი ρυხ *	81
AppNexus	68

Allowing for sub-syndication (108)	
YAHOO! FOR PUBLISHERS	127
> telaria	127
**OpenX	111
(npicou	111
mo pub *	97
AppNexus	97
A 9	95
PubMatic	95
D by Act.	89
□ 3 Nidex exchange	87
DoubleClick Ad Exotrange	65

Brand momentum (106)	
DoubleClick Ad Exchange vow	126
YAHOO!	117
AppNexus	115
PubMatic	109
D by Aai	102
*\overline{\mathcal{O}}\text{penX}	98
□, INDEX EXCHANGE	96
mo pub *	92
npicöü	92
& 9	79
> telaria	74

Q: How would you rate this Supply-Side Platform (SSP) on the following business and market criteria?

Base: Considering Supply Side Platforms (Variable Base)

Advertiser Perceptions 33



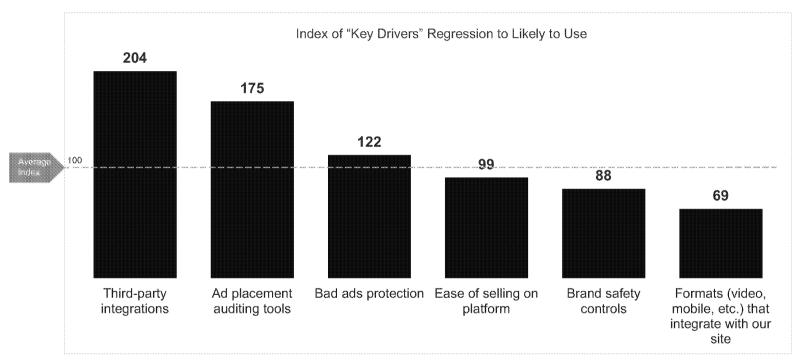
- Ability to deliver native, video and mobile formal that integrate with our site's look and feet.

- Patrick and a tile in the

- The Managarity of add

Supply State Platform

Of 11 tech criteria which are key to driving intention? 3rd party integration and ad placement auditing tools



Q: How likely are you to actually use each of the Supply-Side Platforms (SSPs) you said you are considering for use in the coming year? Base: Total Digital Publisher Respondents

Q: How would you rate this Supply-Side Platform (SSP) on the following technology criteria?

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Regression Analysis is a statistical method designed to derive the relationship between characteristics and/or behaviors. Advertiser Perceptions utilizes regression analysis to show relationships between selection criteria and their influence on plans to buy. The analysis determines which criteria have the greatest impact on achieving the desired results.

Advertiser Perceptions 34

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Consideration rankings (see slide 21) Leaders

- Barrier Exchange

DCLK perceived to be in tight race for lead in 3rd party integrations Brand safety issue rearing its head in low "bad ads" rating?

Index of Percent Rating SSPs 10 on a 10-Point Scale

Third-party integrations (204)	
PubMatic	119
(1) by Aci.	118
DoubleClick Ad Exchange	117
YAHOO!	107
A 9	105
LNPICO	98
□ III INDEX EXCHANGE	97
mo pub *	93
AppNexus	86
>> telaria	85
*UpenX	76

[⊕] \man∀	132
**************************************	127
E "RNDEX EXCHANGE	116
(D)	108
PubMatic	102
DoubleClick Ad Exchange	101
YAHOO!	97
ι∩ριငံဝိုပ္ဖံ့	88
> telaria	83
AppNexus	77
mo pub *	71

Bad ads protection (122)	on
(1) by Agil	124
A 9	120
*\u00fcpenX	115
upicou	115
YAHOO! FOR POSLISMENS	108
PubMatic	107
AppNexus	101
□□3 □ **ndex exchange	99
> telaria	88
DoubleClick Ad Exchange	66
mo pub *	57

Q: How would you rate this Supply-Side Platform (SSP) on the following technology criteria?

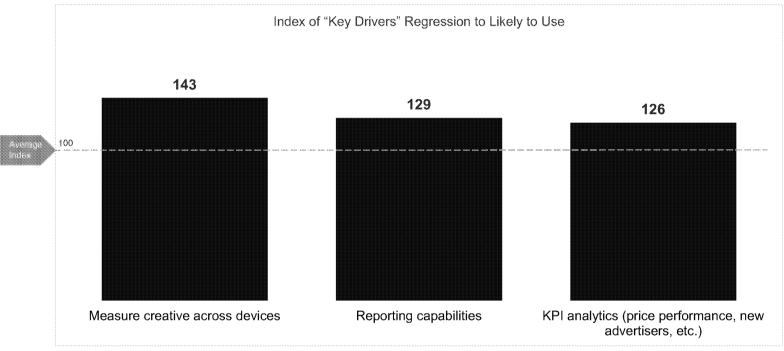
Base: Considering Supply Side Platforms (Variable Base)

Advertiser Perceptions 35



- Analytics providing key metric performance on pricing, campaign effectiveness, new advertisers, etc.
- Measure creative performance across devices
- KOI measurement optimization across devices

Publishers care most about measuring creative across devices, reporting, and KPI analytics



Q: How likely are you to actually use each of the Supply-Side Platforms (SSPs) you said you are considering for use in the coming year? Base: Total Digital Publisher Respondents

Q: How would you rate this Supply-Side Platform (SSP) on the following measurement and analytics criteria? Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

criteria have the greatest impact on achieving the desired results.

Regression Analysis is a statistical method designed to derive the relationship between characteristics and/or behaviors. Advertiser Perceptions utilizes regression analysis to show relationships between selection criteria and their influence on plans to buy. The analysis determines which

Advertiser Perceptions 36

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Consideration rankings (see slide 21) Leaders

Google typically seen as a leader in analytics & measurement, DCLK uncharacteristically trails in all reporting/analytics criteria

Index of Percent Rating SSPs 10 on a 10-Point Scale

Measure creative across de (143)	Vices
Pub Matic	146
(npico	114
A 9	113
(1) try Act.	111
□ INDEX EXCHANGE	105
>> telaria	101
*\u00f3penX	100
YAHOO!	94
mo pub *	94
DoubleClick Ad Exchange	65
AppNexus	56

Reporting capabilities (129)	*****
>> telaria	140
PubMatic	117
YAHOO!	112
*\u00fcpenX	111
A 2	103
D ,5,4.6.	96
OubleClick Ad Exchange	95
(npicöü	89
**************************************	88
mo pub *	78
AppNexus	71

KPI analytics	
(price performance, new advertis (126)	
Lnpico	119
& 9	110
☐ INDEX EXCHANGE	109
>> telaria	105
YAHOO!	105
AppNexus	98
mo pub *	98
(1) by Aos.	96
PubMatic	90
OoubleClick Ad Exchange ,	88
**OpenX	82

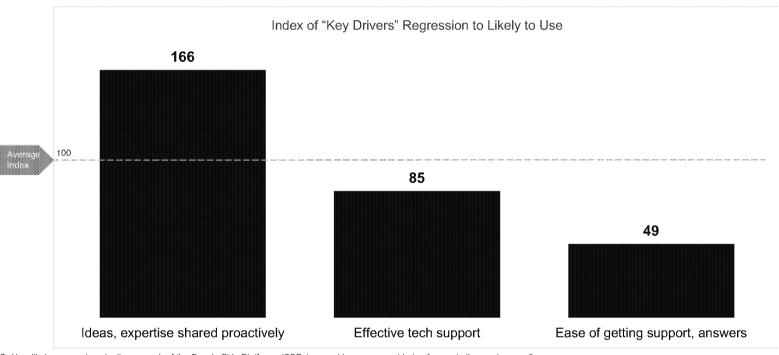
Q: How would you rate this Supply-Side Platform (SSP) on the following measurement and analytics criteria? Base: Considering Supply Side Platforms (Variable Base)

Advertiser Perceptions 37



- Proactively share idea and expertise to enable us to succeed
- 2. Make it easy for us to find the solutions or

Ideas and expertise matter most when it comes to sales support



Q: How likely are you to actually use each of the Supply-Side Platforms (SSPs) you said you are considering for use in the coming year? Base: Total Digital Publisher Respondents

Q: How would you rate this Supply-Side Platform (SSP) on the following <u>service and support</u> criteria?

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Regression Analysis is a statistical method designed to derive the relationship between characteristics and/or behaviors. Advertiser Perceptions utilizes regression analysis to show relationships between selection criteria and their influence on plans to buy. The analysis determines which criteria have the greatest impact on achieving the desired results.

Advertiser Perceptions 38



Consideration ranking: (see slide 21) Leaders

- 5 MORIO

DCLK below average in sales support

Index of Percent Rating SSPs 10 on a 10-Point Scale

ldeas, expertise shared proactively (166)	
A 9	127
I NIDEX EXCHANGE	119
Lnpicöü <u>;</u>	111
YAHOO!	111
> telaria	104
PubMatic	103
(D) by AGI.	96
DoubleClick Ad Exchange ,	90
**OpenX	85
AppNexus	80
mo pub "	74

Q: How would you rate this Supply-Side Platform (SSP) on the following service and support criteria? Base: Considering Supply Side Platforms (Variable Base)

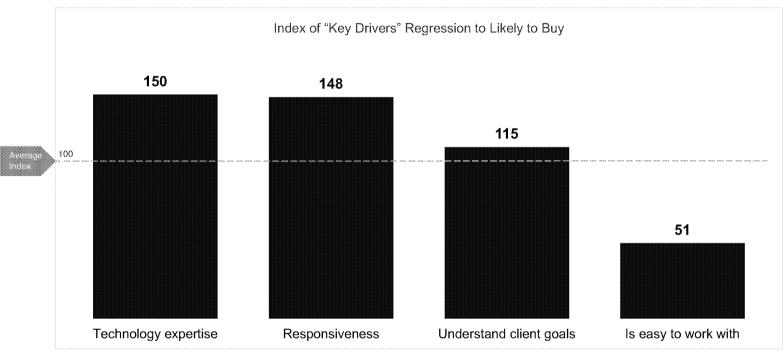
Advertiser Perceptions 39



- Demonstrates knowledge of published goals, needs
- Responsive to client recis
- Sales skills (listering attentiveness, negotiating, etc.)

Supply State Platform

What do publishers want from your sales teams? Tech expertise and responsiveness lead 6 criteria



Q: How likely are you to actually use each of the Supply-Side Platforms (SSPs) you said you are considering for use in the coming year? Base: Total Digital Publisher Respondents

Q: How would you rate this Supply-Side Platform (SSP) on the following sales relationship criteria?

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Regression Analysis is a statistical method designed to derive the relationship between characteristics and/or behaviors. Advertiser Perceptions utilizes regression analysis to show relationships between selection criteria and their influence on plans to buy. The analysis determines which criteria have the greatest impact on achieving the desired results.

Advertiser Perceptions 40

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Consideration rankings (see slide 21) Leaders

- 4000000

Supplied State Medical

DCLK average in tech expertise and understanding client goals

Index of Percent Rating SSPs 10 on a 10-Point Scale

Technology expertise (150)	
Pub Matic	139
YAHOO! POR PUBLISHEPS	122
III III III III III III III III III II	119
(1) by Aos.	112
OoubleClick Ad Exchange	106
AppNexus	96
mo pub *	90
>telaria	84
A 9	82
Lnpicoပွဲပုံ့	82
∜JpenX	68

Responsiveness (148)	
1) by Aai.	123
(npicoji	121
PubMatic	118
> telaria	113
A 9	105
□ INDEX EXCHANGE	104
mo pub *	93
DoubleClick Ad Exchange	91
AppNexus	81
*\u00fcpenX	78
YAHOO!	73

Understand client go (115)	
>> telaria	147
III IIII MIDEX EXCHANGE	116
Lnpic်ဝိပ္ပံ့	104
OubleClick Ad Exchange	102
mo pub *	98
PubMatic	97
A 9.	97
(1) by Asi.	97
AppNexus	85
*\bar{\tau}penX	82
YAHOO! FOR PUBLISHERS	77

Q: How would you rate this Supply-Side Platform (SSP) on the following sales relationship criteria? Base: Considering Supply Side Platforms (Variable Base)

Advertiser Perceptions 41



Consideration rankings (see slide 21) Leaders

- A contract of

- 6 Index Exchang

- TO ONE BY ACI

Overall, DCLK lags leaders in communication

Index of Percent Having Any Communication with SSP Representative (In Person, Phone, Email, etc.) in "Past 90-Days"

Had presentations on market topics or training	
(npicou	136
>> telaria	108
A 9	103
YAHOO! POR PUBLISHEPIS	101
**\u00f3penX	100
AppNexus	97
ന ്ധ	94
Pub Matic	93
DoubleClick Ad Exchange	92
D by Aci.	90
T NIDEX EXCHANGE	85

Met with or had direct contact with representatives	
PubMatic	124
**ÖpenX	123
AppNexus	114
A 9	108
DoubleClick Ad Exchange	106
YAHOO!	106
mo pub *	102
Findexexchange	89
(1) by Aol	88
> telaria	78
nooldur	62

Any Communication	
**UpenX	107
PubMatic	107
A 9	107
rnpico	105
YAHOO!	105
AppNexus	101
mo pub *	99
> telaria	95
□ ndex exchange	94
DoubleClick Ad Exchange	92
(D) ty Aoi.	89

Q: For each Supply-Side Platform (SSP), please indicate whether in the past 90 days you have...? Base: Considering Supply Side Platforms (Variable Base)

Advertiser Perceptions 42



Marketplace Overview

Competitive Landscape

Particular Processing

Appendix

Supply Side Patholic

Key takeaways

Marketplace overview and header bidding

- · What's the promise of programmatic? Efficiency, improving margins, new revenue streams
- Roadblocks? Disruption to legacy publisher model, complexity

Competitive landscape

- Surprise? Publishers are the most familiar with Yahoo/BrightRoll, above Google
- Past SSP usage: Yahoo sizeable lead over others, including DoubleClick
- · 2018 consideration: Yahoo ahead of Google and others, but many are in the race
- 2018 intention: DoubleClick among tight pack of leaders
- If publishers could choose only 1 SSP, Yahoo would lead Google

Advertiser Perceptions 43

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Marketplace Overview

Competitive Landscape

Platform Perceptions

Appendix

Supply State Bladform

Key takeaways

DoubleClick Ad Exchange vs. other SSPs

- · PMP capabilities lead market and business selection criteria
 - · DoubleClick trailing in all key criteria
 - · DoubleClick average in auctions, leading in brand momentum
 - · Not surprisingly, DoubleClick trails in sub-syndication
- · What tech criteria are key to driving intention? 3rd party integration and ad placement auditing tools
 - DoubleClick in tight race for lead in 3rd party integrations
 - Brand safety issue rearing its head in low "bad ads" rating?
- Among technology criteria, publishers care most about measuring creative across devices, reporting, and KPI analytics
 - Google typically seen as a leader in campaign analytics & measurement, DoubleClick uncharacteristically trails in all reporting/analytics criteria

Advertiser Perceptions 44

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Methodology

Marketplace Overview

Competitive Landscape

Participation Foreign Co.

Accessoria



What kinds of data do publishers want from SSPs?

Real time traffic statistics vs. actual sales.
- CEO/Founder (10 -- 20MM)

CTR, viewer totals.
- CRO/Head of Sales (10 – 20MM)

Social and interactive data aimed towards advertising and public awareness.

- CMO (1 – 10MM)

Consumer demographics and purchasing behaviors.

- Director (1 -- 10MM)

Q: What kind of data would be the most useful for your SSP to provide to you as a publisher? Base: Total Digital Publisher Respondents

Attempted malware information to help us find bots and false views or gaming the system.

- **EVP/SVP** (20MM+)

It is good to post data which is based on future goals and targets.

- VP (20MM+)

Data that would include demographics, location, browsing and purchase history.

- Manager (10 – 20MM)

Data about viewer populations, browsing history and their demographics would be ideal.

- Marketer Manager (20MM+)

Indicates monthly unique visitors

Advertiser Perceptions 46

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Methodology

Marketplace Courses

Competitive Landscape

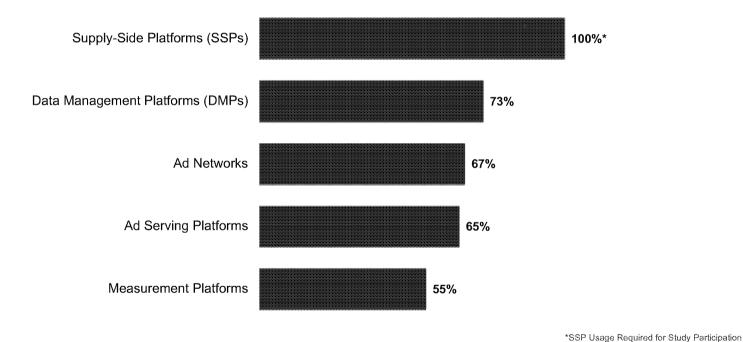
Professional Professional

Appeal

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Most digital publishers are allocating inventory to multiple platforms

Technologies Allocating Inventory To in Past Year



Q. When thinking about offering agencies and marketers programmatic guaranteed advertising, which of these types of marketing and advertising solutions/technologies have you provided inventory to or used in the past year?

Base: Total Digital Publisher Respondents

Advertiser Perceptions 47

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Methodology

Competitive Landscape

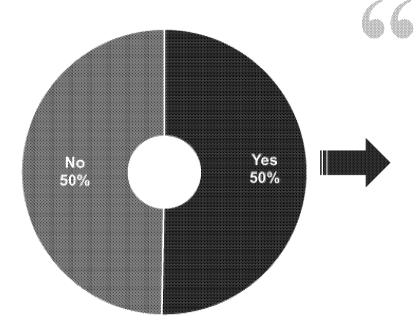
Participation Foreign Co.

Appendix

Supply Side Plantonns

Half use separate SSPs for their channel (mobile, video, native, etc.) focus

Usage of Different SSPs for Different Inventory Types
Percent of Respondents



Q: Do you use different SSPs for different inventory types (e.g., mobile, video, native, etc.)?

Q: Please explain why you use different SSPs.

Base: Total Digital Publisher Respondents

Why Are Publishers Using Multiple SSPs?

Allows us to see who is bidding, what they are paying and how much they are buying.

- CMO (10 - 20MM)

Each client we have likes to have it done in different SSPs not every client likes the same format.

- Director (1 - 10MM)

It allows us to more specifically target the ads based on the user experience and interaction.

- Director (20MM+)

We have different goals on different platforms.

- CRO/Head of Sales (20MM+)

This is highly effective and it integrates pricing floors so that our ad impressions do not get undervalued.

- Manager (10 - 20MM)

It helps us maximize the revenue we receive for our inventory.

- **VP** (10 - 20MM)

Indicates monthly unique visitors

Advertiser Perceptions 48



Methodology

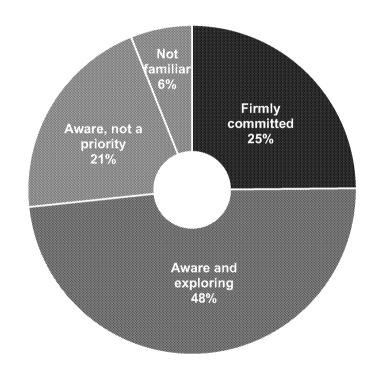
Competitive Landscape

Appendix

Samply Side Planforms

Most publishers are committed to or exploring ads.txt initiative





Q: The IAB has advocated ads.txt as a way for publishers to commit to provide advertisers with safe inventory assurance. How engaged is your publishing firm with ads.txt?

Base: Total Digital Publisher Respondents

Advertiser Perceptions 49



Methodology

Marketplace Overview

Appendix

Supply State Performs

Familiarity with supply side platforms (detail) Google stronger with C-level and larger publishers

Percent of Respondents Rating 10 on a 10-Point Scale

	16% 15% 115%	# of U Monthly		Job Title						
		3 million to less than 15 million or more		C-level	VP/EVP/SVP	Director/ Manager/ Other				
YAHOO!	36%	30%	41%	40%	33%	31%				
DoubleClick Ad Exchange	25%	22%	29%	29%	20%	24%				
**OpenX	25%	17%	33%	24%	28%	24%				
AppNexus	25%	18%	31%	24%	30%	21%				
(npicou	24%	18%	30%	24%	28%	21%				
mo pub *	19%	18%	20%	16%	23%	24%				
PubMatic	19%	13%	24%	22%	15%	17%				
A 9	16%	10%	23%	18%	15%	14%				
E PRINDEX EXCHANGE	16%	11%	20%	17%	13%	17%				
1) by Aoi.	15%	11%	19%	18%	15%	10%				
> telaria	14%	7%	20%	14%	15%	12%				

High

Q: How familiar are you with each of the following Supply Side Platforms (SSPs)? (1 = Not at all Familiar; 10 = Very Familiar) Base: Total Digital Publisher Respondents

Job title color coding is a visual representation of each individual SSP's ratings comparatively by job title. Comparisons are made by partitioning each SSP's ratings into thirds (terciles).

Advertiser Perceptions 50

Low



Methodology

Marketplace Overview

Particular Processing

Appendix

Usage of supply side platforms (detail) C-level is primary DoubleClick segment

		# of U Monthly			Job Title		
	Total	3 million to less than 15 million	15 million or more	C-level	VP/EVP/SVP	Director/ Manager/ Other	
YAHOO! FOR PUBLISHERS	57%	50%	64%	55%	50%	67%	
*\overline{\over	42%	38%	46%	39%	40%	50%	
AppNexus	38%	35%	41%	40%	40%	33%	
DoubleClick Ad Exchange	36%	35%	36%	45%	23%	31%	
LNDICOU!	30%	26%	35%	35%	20%	31%	
mo pub *	29%	26%	33%	30%	28%	29%	
PubMatic	27%	24%	29%	23%	25%	36%	
A 9	25%	27%	23%	29%	15%	26%	
> telaria	24%	21%	28%	25%	20%	26%	
1) by Aos.	18%	9%	27%	18%	15%	19%	
I MINDEX EXCHANGE	15%	15%	16%	20%	5%	14%	

Q: Which of these Supply Side Platforms (SSPs) you said you are familiar with have you used in the past year? Base: Total Digital Publisher Respondents

Advertiser Perceptions 51

Low

Job title color coding is a visual representation of each individual SSP's ratings comparatively by job title. Comparisons are made by partitioning each SSP's ratings into thirds (terciles).



Methodology

Marketplace Overview

Competitive Landscape

Patent Perception

Street, Street, Performance

Consideration of supply side platforms (detail)

Percent of Respondents Rating 10 on a 10-Point Scale

		# of U Monthly		Job Title					
	25% 24% 22% 21% 21% 19% 19% 16%	3 million to less than 15 million	15 million or more	C-level	VP/EVP/SVP	Director/ Manager/ Other			
YAHOO!	25%	17%	34%	25%	30%	21%			
AppNexus	24%	20%	29%	25%	30%	17%			
**OpenX	22%	18%	27%	24%	15%	26%			
ιηρι ċ ος;	21%	18%	24%	19%	15%	31%			
DoubleClick Ad Exchange	21%	18%	23%	25%	15%	17%			
I INDEX EXCHANGE	19%	16%	23%	24%	20%	10%			
PubMatic	19%	11%	27%	16%	23%	21%			
mo pub *	16%	9%	23%	16%	20%	12%			
> telaria	15%	11%	19%	18%	20%	5%			
& 9	14%	10%	18%	17%	18%	5%			
1 by Aci.	13%	7%	19%	18%	15%	2%			

Q: How likely are you to consider each of the Supply Side Platforms (SSPs) you said you are familiar with for use in the coming year?

(1 = Not at all Likely; 10 = Very Likely) Base: Total Digital Publisher Respondents

Job title color coding is a visual representation of each individual SSP's ratings comparatively by job title. Comparisons are made by partitioning each SSP's ratings into thirds (terciles).

Advertiser Perceptions 52

Low



Methodology

Marketplace Courses

Competitive Landscape

Professional Professional

Intention of supply side platforms (detail)

Percent of Respondents Rating 10 on a 10-Point Scale

		# of U Monthly		Job Title					
	Total	3 million to less than 15 million	15 million or more	C-level	VP/EVP/SVP	Director/ Manager/ Other			
**UpenX	25%	24%	25%	27%	20%	26%			
App Ne xus	24%	22%	27%	24%	25%	24%			
DoubleClick Ad Exchange	23%	20%	27%	25%	28%	14% 17%			
YAHOO!	23%	20%	27%	28%	20%				
rnpiင်ဝံပူ့	19%	15%	24%	19%	15%	24%			
PubMatic	19%	16%	22%	16%	20%	24%			
≫ telaria	19%	17%	20%	25%	10%	14%			
mo pub *	16%	12%	19%	17%	20%	10%			
A 9	15%	5%	24%	14%	20%	10%			
Mindex exchange	15%	12%	17%	17%	13%	12%			
(1) by Act.	14%	11%	17%	18%	10%	10%			

Q: How likely are you to actually use each of the Supply Side Platforms (SSPs) you said you are considering for use in the coming ye.

(1 = Not at all Likely; 10 = Very Likely) Base: Total Digital Publisher Respondents

Advertiser Perceptions 53

Low

Job title color coding is a visual representation of each individual SSP's ratings comparatively by job title. Comparisons are made by partitioning each SSP's ratings into thirds (terciles).



Methodology

Marketplace Courses

Competitive Landscape

Particular Processing

Preference of supply side platforms (detail)

		# of U Monthly		Job Title						
		Total 3 million to less than 15 million or more		C-level	VP/EVP/SVP	Director/ Manager/ Other				
YAHOO! FOR PUBLISHERS	24%	22%	25%	23%	21%	29%				
DoubleClick Ad Exchange	15%	16%	14%	22%	10%	7%				
**OpenX	15%	10%	19%	13%	21%	12%				
AppNexus	13%	12%	13%	8%	23%	12%				
LAPICÖÜ	12%	10%	13%	11%	10%	14%				
PubMatic	7%	10%	5%	10%	3%	7%				
ന ്വാ	4%	7%	1%	5%	0%	7%				
A 9	4%	5%	4%	2%	8%	5%				
≫ telaria	4%	5%	2%	4%	3%	5%				
BNOEX EXCHANGE	2%	2%	1%	1%	3%	2%				
(1) by Add.	1%	0%	1%	1%	0%	0%				

Q: If you were to only select one, which of these Supply-Side Platforms (SSPs) would you choose to partner with for an advertising ca
Base: Intend to Total Digital Publisher Respondents in the Next Year)

Job title color coding is a visual representation of each individual SSP's ratings comparatively by job title. Comparisons are made by partitioning each SSP's ratings into thirds (terciles).

Advertiser Perceptions 54

Low



Methodology

Marketplace Overview

Competitive Landscape

Patent Perception

Supply State Performs

Net promoter score (detail)

Net Promoter Score	Total	# of U Monthly			Job Title					
(Promoters Minus Detractors)	Respondents	3 million to less than 15 million	15 million or more	C-level	VP/EVP/SVP	Director/ Manager				
DoubleClick Ad Exchange	61	69	53	68	67	38				
ι∩ριċöüֳ	52	62	45	55	13	69				
*OpenX	45	52	39	44	50	43				
① by Aot. *	45	71	36	47	33	50				
AppNexus	44	55	35	42	63	29				
* ** ** ** ** ** ** ** ** ** ** ** ** *	44	50	38	35	50	67				
ლი ის *	42	43	41	44	27	50				
YAHOO! FOR PUBLISHERS	41	51	34	48	30	39				
≫ telaria	40	41	39	29	25	73				
A 9	39	32	47	25	67	55				
PubMatic	34	45	25	37	10	47				

Delta = 5+

High

Low

Q: How likely would you be to recommend to a colleague the Demand Side Platform(s) (DSPs) you have used in the past year? Base: Total Digital Publisher Respondents (Variable Base)

Job title color coding is a visual representation of each individual SSP's ratings comparatively by job title. Comparisons are made by partitioning each SSP's ratings into thirds (terciles).

*Base Size = 20-29 (Small Base)

Advertiser Perceptions 55



Methodology

North Colors

Appendix

Supply State Platforms

What makes these SSPs a preferred partner?

Reasons for SSP Preference Percent of Respondents



"They have given the right platform to both buyers and sellers to work out and meet their digital marketing needs and goals."
- CMO (1 – 10MM)

"Ability to pull daily spend reports in order to provide our clients with accurate reporting."

- Director (1 – 10MM)

"Allows us to contact buyers directly to offer them custom-made packages of data."

- Manager (10-20MM)



"Offers us an automated auditing tools so we can straightforwardly organize where our ads get served."

- CTO (1 - 10MM)

"Clear and compelling with advanced technology."

- CMO (20MM+)

"Can analyze the best possible value on our ad inventory."

- Manager (10 - 20MM)

Indicates monthly unique visitors

Advertiser Perceptions 56

Q: What does [SSP] do or offer that makes them your preferred partner? Base: Total Digital Publisher Respondents

DoubleClick Ad Exchange

"They have always delivered amazing

customer service and features that allow me

to make any/all changes on the fly."

- CEO/Founder (10 - 20MM)

"It has the highest quality ad marketplace and

built for supply partners and maximizes

business goals."

- CMO (1 - 10MM)

"They have been our go to for years so we

are most comfortable here."

- CRO/Head of Sales (20MM+)

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Marketplace Overview

Competitive Landscape

Participation Foreign Co.

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What makes these SSPs a preferred partner?

Reasons for SSP Preference
Percent of Respondents



"Offer features like ad servers are built to support buy-side and sell-side workflows across display, mobile, video and native ads."
- COO (1 – 10MM)

"Their platform simplifies the most sophisticated and machine learning and data science for better use."

- VP (20MM+)

"Gives us both full control of our media buying and transparency across the campaign lifecycle—driving more profit out of every dollar spent on advertising."

- VP (20MM+)



"You get the spirit of a startup and the support of a public company."

- CMO (20MM+)

"They have the right level of data we need."

- VP (1 – 10MM)

"They have engineered one of the largest real time cloud and Big Data computing systems. They process trillions of transactions within milliseconds each month."

- Director (1 - 10MM)

Indicates monthly unique visitors

Advertiser Perceptions 57

Q: What does [SSP] do or offer that makes them your preferred partner? Base: Total Digital Publisher Respondents

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Methodology

Marketplace Courses

Competitive Landscape

4 (100)

What do SSPs need to do to improve?

Preferred SSP Potential Improvements
Percent of Respondents



"Improve Third-Party Integrations, Inventory and Ad Quality, Open APIs and Customization."

- COO (1 – 10MM)

"Fair fee structures for the publisher's good percentage sharing of the revenue plans."

- EVP/SVP (20MM+)

"Easier flow of business."
- VP (20MM+)



"Improve transfer speed." - CEO/Founder (1 – 10MM)

"Better features." - CMO (10 - 20MM)

"Improve pacing with proportional control."

- Director (1 – 10MM)

Q: How can [SSP] improve further? Base: Total Digital Publisher Respondents Indicates monthly unique visitors

Advertiser Perceptions 58



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Marketplace Courses

Concettive Landscape

Particle Perceptions

4 (100)

Supply Slote Platforms

Brand ratings: business & market criteria

Index of Percent Rating SSPs 10 on a 10-Point Scale

Clear and compelling technology roadmap		Open exchange capabilities		Fee transparency		Payment terms (e.g., Net 30, 60, 90)		Fee structures and revenue sharing plans that are fair to the publisher		Leading edge header bidding capabilities		Thought leadership of ad tech brand	
PubMatic	118	Index Exchange	146	PubMatic	118	OpenX	133	A9	143	A9	129	Index Exchange	133
Yahoo for Publishers	113	PubMatic	134	ONE by AOL	116	Index Exchange	121	ONE by AOL	121	PubMatic	129	Rubicon	126
A9	111	Rubicon Project	116	Index Exchange	116	ONE by AOL	115	Index Exchange	115	Rubicon Project	125	Project Yahoo for	113
Rubicon Project	106	MoPub	114	Telaria	112	Yahoo for Publishers	111	OpenX	112	DoubleClick Ad Exchange	121	Publishers	
OpenX	106	Yahoo for Publishers	102	OpenX	112	Rubicon Project	103	Yahoo for Publishers	112	ONE by AOL	121	ONE by AOL	104
MoPub	99	ONE by AOL	100	Yahoo for Publishers	105	DoubleClick Ad Exchange	101	Rubicon Project	98	AppNexus Publisher SSP	92	PubMatic OpenX	100 95
ONE by AOL	98	AppNexus Publisher SSP	89	Rubicon Project	97	MoPub	91	PubMatic	97	Index Exchange	89	AppNexus Publisher SSP	94
DoubleClick Ad Exchange	97	Telaria	89	A9	90	A9	89	DoubleClick Ad Exchange	89	Yahoo for Publishers	85	A9	94
Index Exchange	97	A9	81	DoubleClick Ad Exchange	82	AppNexus Publisher SSP	84	Telaria	79	MoPub	73	Telaria	89
Telaria	93	DoubleClick Ad Exchange	79	AppNexus Publisher SSP	79	PubMatic	82	AppNexus Publisher SSP	67	Telaria	72	MoPub	83
AppNexus Publisher SSP	62	OpenX	51	MoPub	72	Telaria	69	MoPub	67	OpenX	63	DoubleClick Ad Exchange	69

Q: How would you rate this Supply-Side Platform (SSP) on the following business and market criteria? Base: Considering Supply Side Platforms (Variable Base)

Advertiser Perceptions 59



Methodology

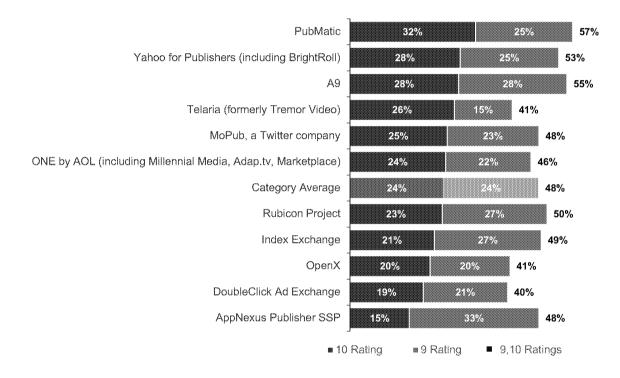
Marketplace Charles

Competitive Landscape

Professional Professional

Business and market criteria: effective and engaging formats

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following <u>business and market</u> criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 60



Methodology

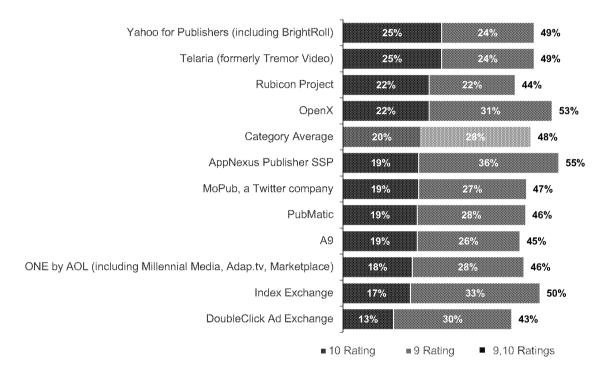
Marketplace Overview

Competitive Landscape

Particular Processing

Business and market criteria: allowing for sub-syndication

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following <u>business and market</u> criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 61



Methodology

Marketplace Charles

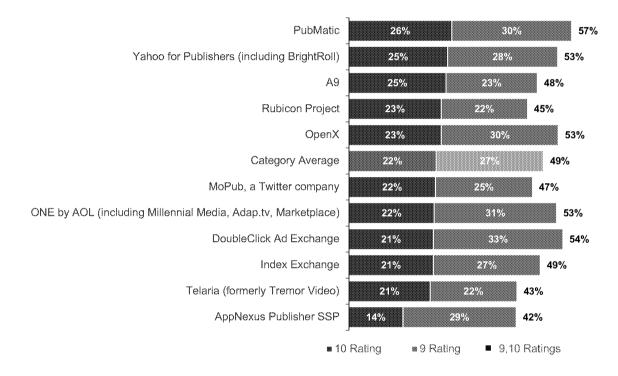
Competitive Landscape

Particular Processing

Appeal

Business and market criteria: clear and compelling technology roadmap

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following <u>business and market</u> criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 62



Methodology

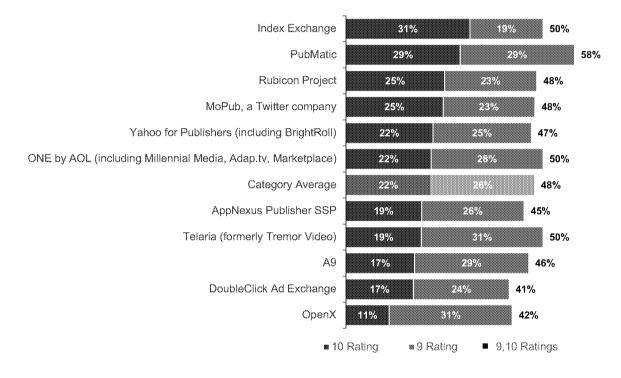
Marketplace Charles

Competitive Landscape

Professional Professional

Business and market criteria: open exchange capabilities

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following <u>business and market</u> criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 63



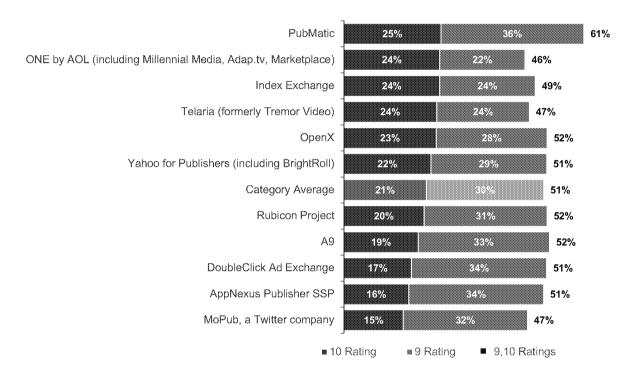
Methodology

Marketplace Overview

Competitive Landscape

Business and market criteria: fee transparency

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following <u>business and market</u> criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 64



Methodology

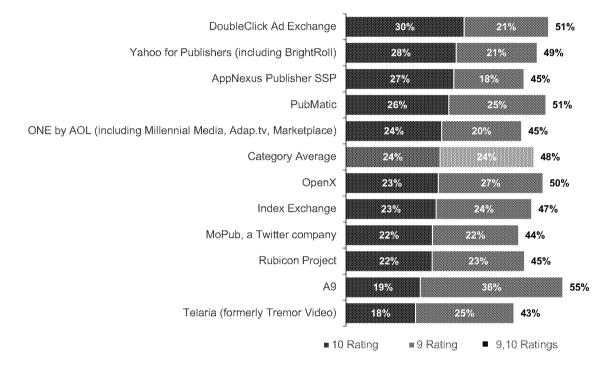
Marketplace Overview

Competitive Landscape

Professional Professional

Business and market criteria: positive momentum for brand in the market

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following <u>business and market</u> criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 65



Methodology

Marketplace Charles

Concettive Landscape

Flatform Perceptions

Supply State Platforms

Brand ratings: technology criteria

Index of Percent Rating SSPs 10 on a 10-Point Scale

9001 912		book		Appropriate native mob mob that in		Appropriate native, mobile that inte controls our site		brand salety		Ability to del native, video mobile form that integrate our site's lool feel		Visibility i accurate availabli inventor		Viewabilit ads	/ 0 /	Supporte inventory for		Data availa in the platfo		Resources/too overseeing quality	
A 9	131	Rubicon Project	128	Rubicon Project	142	PubMatic	141	ONE by AOL	119	PubMatic	129	A 9	120	Yahoo for Publishers	117						
Yahoo for Publishers	127	PubMatic	126	PubMatic	111	Rubicon Project	138	PubMatic	109	Rubicon Project	125	PubMatic	114	A9	110						
PubMatic	112	ONE by AOL	111	A9	111	Yahoo for Publishers	110	DoubleClick Ad	107	ONE by AOL	120	OpenX	109	PubMatic	110						
				,		DoubleClick	404	Exchange	404	A9	116	AppNexus Publisher SSP	107	Index Exchange	108						
Telaria	108	Telaria	105	OpenX	105	Ad Exchange	101	Telaria	104	Yahoo for Publishers	111	Telaria	102	Rubicon Project	105						
DoubleClick Ad Exchange	104	MoPub	105	ONE by AOL	104	AppNexus Publisher SSP	97	Rubicon Project	103	Index Exchange	102	ONE by AOL	100	Telaria	99						
ONE by AOL	99	DoubleClick Ad Exchange	102	Index Exchange	96	A9	96	AppNexus Publisher	103	MoPub	91	Yahoo for Publishers	96	MoPub	98						
Index Exchange	98	Au Exchange AppNexus Publisher SSP	91	DoubleClick Ad Exchange	96	OpenX	90	SSP Index Exchange	101	DoubleClick Ad Exchange	89	Index Exchange	93	ONE by AOL	97						
OpenX	87	A9	89	Yahoo for Publishers	92	Index Exchange	88	A9	96	OpenX	77	Rubicon Project	88	OpenX	92						
Rubicon Project	81	Index Exchange	88	Telaria	92	Telaria	84	Yahoo for Publishers	91	Telaria	72	DoubleClick Ad Exchange	87	AppNexus Publisher SSP	86						
AppNexus Publisher SSP	77	OpenX	80	AppNexus Publisher SSP	79	MoPub	79	MoPub	85	AppNexus		0		DoubleClick							
MoPub	77	Yahoo for Publishers	75	MoPub	72	ONE by AOL	77	OpenX	83	Publisher SSP	67	MoPub	83	Ad Exchange	78						

Q: How would you rate this Supply-Side Platform (SSP) on the following technology criteria? Base: Considering Supply Side Platforms (Variable Base)

Advertiser Perceptions 66



Methodology

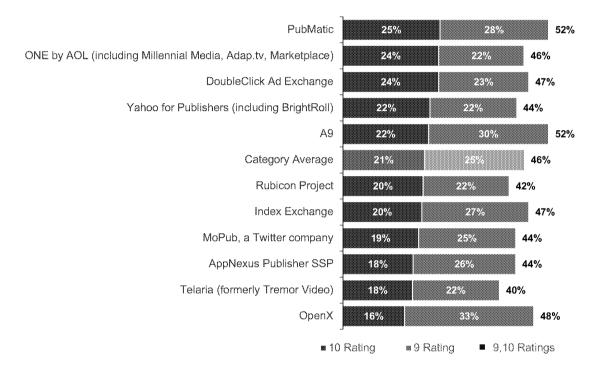
Marketplace Overview

Competitive Landscape

Professional Professional

Technology criteria: third-party integrations

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following <u>technology</u> criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 67



Methodology

Marketplace Overview

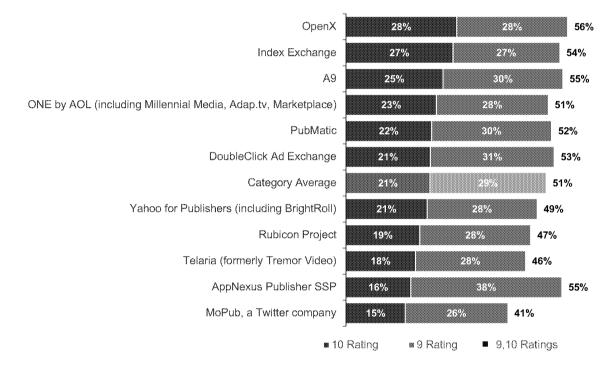
Competitive Landscape

Professional Professional

A 100 CO

Technology criteria: auditing tools for control over ad placement

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following <u>technology</u> criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 68



Methodology

Marketplace Overview

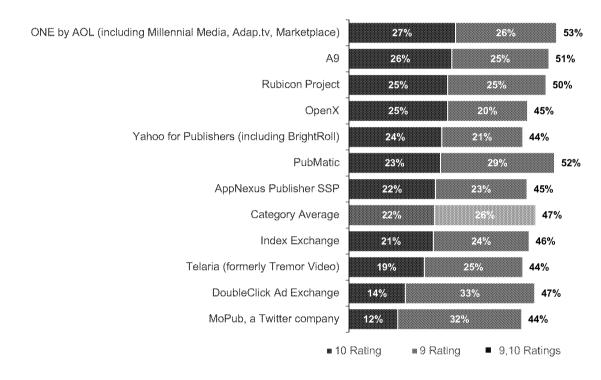
Competitive Landscape

Particular Processing

Accessor

Technology criteria: bad ads protection

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following technology criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 69



Methodology

Marketplace Courses

Concettive Landscape

Brand ratings: measurement and analytics criteria

Index of Percent Rating SSPs 10 on a 10-Point Scale

ROI measurement/optimization across device	
Rubicon Project	146
ONE by AOL	145
Yahoo for Publishers	118
MoPub	98
PubMatic	97
Index Exchange	96
DoubleClick Ad Exchange	96
A9	90
Telaria	79
AppNexus Publisher SSP	73
OpenX	63

Q: How would you rate this Supply-Side Platform (SSP) on the following measurement and analytics criteria? Base: Considering Supply Side Platforms (Variable Base)

Advertiser Perceptions 70



Methodology

Marketplace Courses

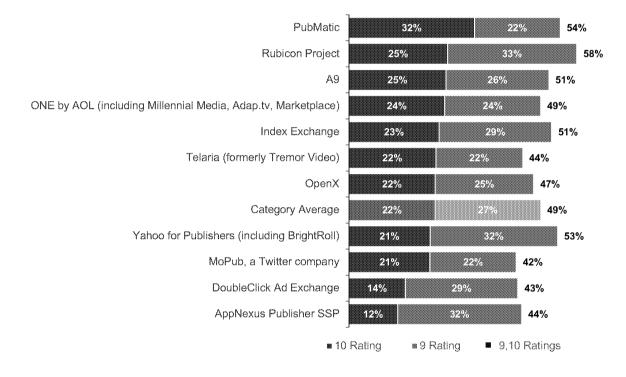
Competitive Landscape

Professional Professional

Appendix

Measurement and analytics criteria: measure creative performance across devices

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following measurement and analytics criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 71



Methodology

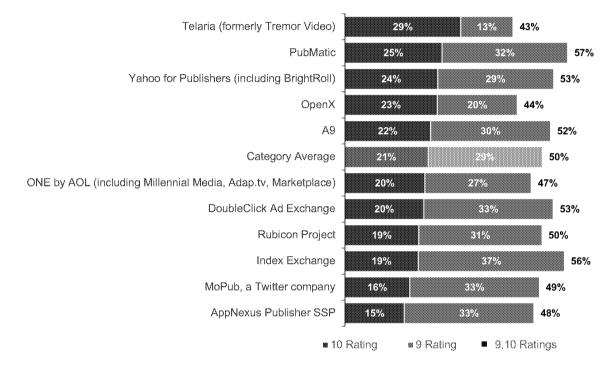
Marketplace Overview

Competitive Landscape

Samply Side Planforms

Measurement and analytics criteria: availability of reporting

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following measurement and analytics criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 72



Methodology

Marketplace Overview

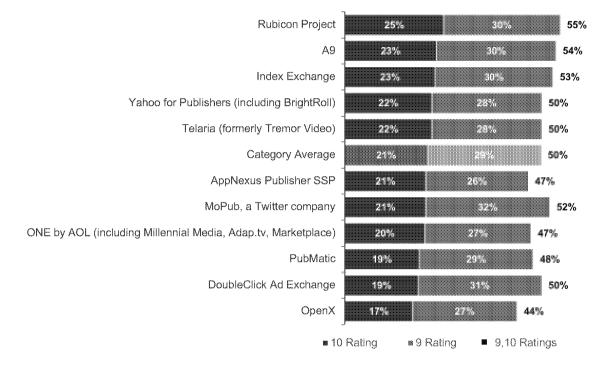
Competitive Landscape

Patent Perception

Appendix

Measurement and analytics criteria: analytics providing key metric performance

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following measurement and analytics criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 73



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Marketplace Courses

Concettive Landscape

Particle Perception

Brand ratings: service and support criteria

Index of Percent Rating SSPs 10 on a 10-Point Scale

Telaria	135
Yahoo for Publishers	128
A9	126
PubMatic	119
Index Exchange	110
ONE by AOL	97
Rubicon Project	88
MoPub	84
AppNexus Publisher SSP	77
DoubleClick Ad Exchange	73
OpenX	64

Make it easy for us to find the solutions or answers we need		
Rubicon Project	143	
Index Exchange	125	
Telaria	122	
А9	120	
AppNexus Publisher SSP	102	
DoubleClick Ad Exchange	94	
ONE by AOL	89	
MoPub	78	
Yahoo for Publishers	77	
PubMatic	76	
OpenX	75	

Supply State Participation

Q: How would you rate this Supply-Side Platform (SSP) on the following service and support criteria? Base: Considering Supply Side Platforms (Variable Base)

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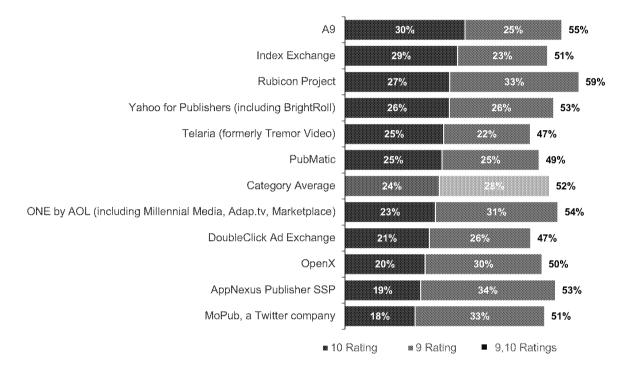
Marketplace Overview

Competitive Landscape

Professional Professional

Service and support criteria: proactively share ideas and expertise for success

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following <u>service and support</u> criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 75



Methodology

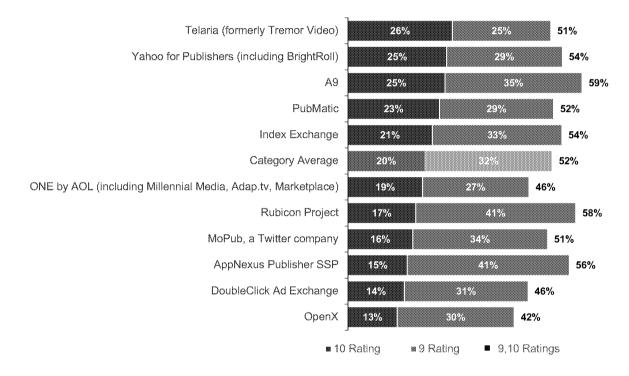
Marketplace Overview

Competitive Landscape

Particle Perception

Service and support criteria: effective tech support

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following <u>service and support</u> criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 76



Methodology

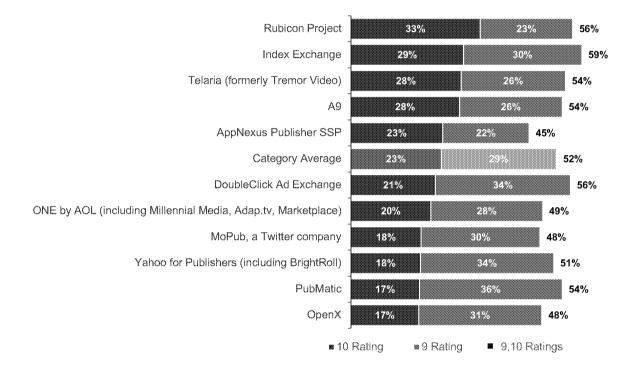
Marketplace Courses

Competitive Landscape

Particle Perception

Service and support criteria: make it easy for us to find solutions/answers we need

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following <u>service and support</u> criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 77



Methodology

Marketplace Overview

Concettive Landscape

Platform Perceptions

40.00

Brand ratings: sales relationship criteria

Index of Percent Rating SSPs 10 on a 10-Point Scale

Is easy to work with		
PubMatic	146	
А9	118	
ONE by AOL	115	
DoubleClick Ad Exchange	111	
Rubicon Project	103	
Telaria	103	
Index Exchange	94	
AppNexus Publisher SSP	90	
MoPub	74	
Yahoo for Publishers	74	
OpenX	73	

Sales skills (listening, attentiveness, negotiating, etc.)	
Yahoo for Publishers	125
Rubicon Project	113
AppNexus Publisher SSP	105
PubMatic	105
Telaria	100
OpenX	100
ONE by AOL	98
DoubleClick Ad Exchange	97
Index Exchange	91
MoPub	87
A9	80

Demonstrates knowledge of publisher goals, needs		
PubMatic	137	
Telaria	113	
MoPub	111	
Index Exchange	110	
Rubicon Project	106	
А9	98	
ONE by AOL	91	
AppNexus Publisher SSP	86	
OpenX	85	
DoubleClick Ad Exchange	84	
Yahoo for Publishers	80	

Q: How would you rate this Supply-Side Platform (SSP) on the following sales relationship criteria? Base: Considering Supply Side Platforms (Variable Base)

Advertiser Perceptions 78

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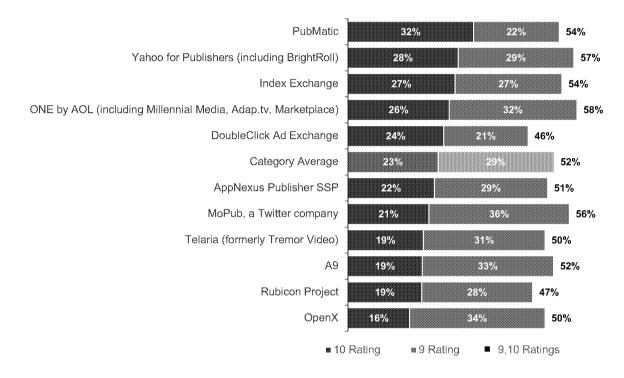
Methodology

Marketplace Overview

Competitive Landscape

Sales relationship criteria: technology expertise

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following sales relationship criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 79



Methodology

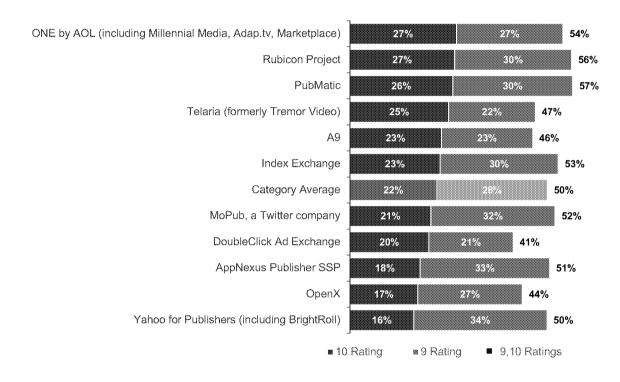
Marketplace Overview

Competitive Landscape

Professional Professional

Sales relationship criteria: responsive to client needs

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following sales relationship criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 80



Methodology

Marketplace Overview

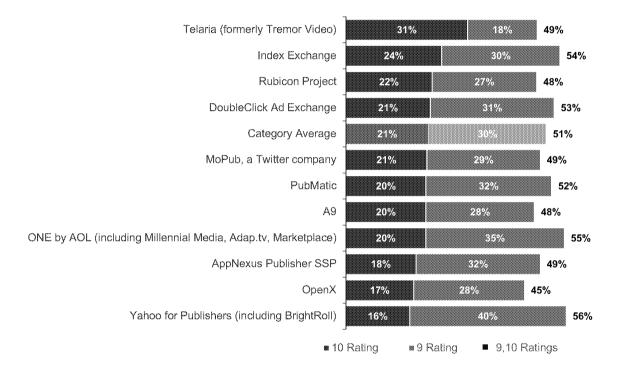
Competitive Landscape

Patent Perception

Samply Side Planforms

Sales relationship criteria: understanding of client goals, needs

Percent Rating Media Brands 9-10 on a 10-Point Scale (Sorted by 10 Ratings)



Q: How would you rate this Supply-Side Platform (SSP) on the following sales relationship criteria? (1 to 3 = Not Very Impressed with Brand; 4 to 7 = Moderately Impressed with Brand; 8 to 10 = Highly Impressed with Brand)

Base: Considering Supply-Side Platform in the Coming Year (Variable Base)

Advertiser Perceptions 81



Methodology

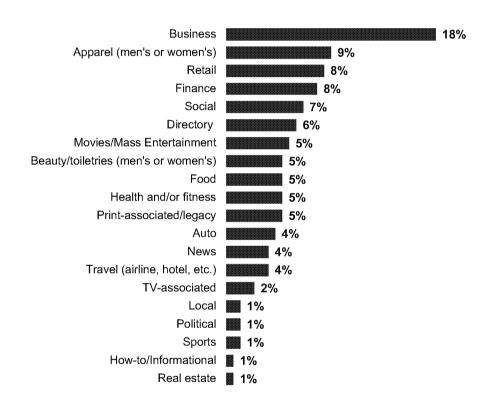
Marketplace Overview

Competitive Landscape

Particle Perception

Supply Side Flatforms

Type of site most involved in selling ad space



Q: Which type of site are you most involved in for selling ad space?
 Base: Total Digital Publisher Respondents

Advertiser Perceptions 82



Methodology

Marketplace Overview

Competitive Landscape

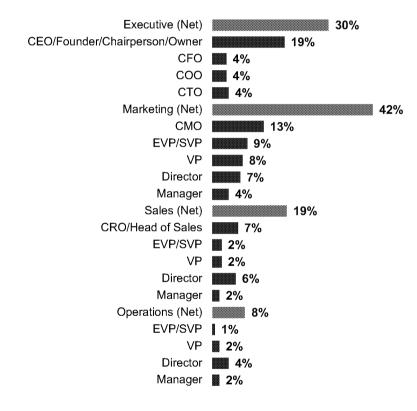
Platform Perceptions

A production

Supply State Matternatio

Q: What is your job title? Base: Total Digital Publisher Respondents

Job title



Advertiser Perceptions 83





What Advertisers Think*

The More You Know
The Stronger Your Brand
The More You'll Sell™



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